

The Selected Information Sources on Poisoning and Toxicology

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The third leading cause of unintentional injury death in 1993 was poisoning by solids and liquids, just behind motor vehicle accidents and falls.¹ Poisoning and toxicology impacts all health care professionals. Physicians and emergency medicine professionals manage acute care, health educators address prevention and public education, and researchers focus on advancements.

This article is an introduction to selected basic through advanced print and electronic information sources for anyone interested in poisoning and toxicology. All sources are available through the Hawaii Medical Library.

Print Sources

Books

The following titles are listed in the "Selected List of Books and Journals for the Small Medical Library,"² commonly referred to as the Brandon-Hill List. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has designated this list as an authoritative resource³ for establishing a core library collection. For toxicology, there are five titles:

Ellenhorn, Matthew J., ed. *Ellenhorn's Medical Toxicology: Diagnosis and Treatment of Human Poisoning*. 2nd ed. Baltimore, Williams & Wilkins, c1997.

The focus is principles of poison management, drugs, home, chemicals, and natural toxins. Information is presented in a readable, easy to find format.

Goldfrank, Lewis R. [and others]. *Goldfrank's Toxicologic Emergencies*. 5th ed. Norwalk, Conn.: Appleton & Lange, c1994.

The emphasis is managing emergencies: ingestion, preventing absorption, enhancing elimination.

Klaassen, Curtis D., ed. *Casarett and Doull's Toxicology: the Basic Science of Poisons*. 5th ed. New York: McGraw-Hill, Health Professions Division, c1996.

This edition contains additional chapters on: toxicokinetics, mechanisms of toxicity, toxic responses of the endocrine system, and recommended limits for exposure to chemicals.

Lu, Frank C. *Basic Toxicology: Fundamentals, Target Organs, and Risk Assessment*. 3rd ed. Washington, D.C.: Taylor & Francis, c1996.

This is an introductory text in the fundamentals of toxicology.

Olson, Kent R. [and others], eds. *Poisoning & Drug Overdose*. 2nd ed. Norwalk, Conn.: Appleton & Lange, c1994.

Presented in an outline format, practical, ready-reference information is given for diagnosis, management, and treatment.

Journals

Annual Review of Pharmacology and Toxicology

The focus is on research advances.

Environmental Health Perspectives : EHP.

This is a journal of the National Institute of Health, National Institute of Environmental Health Sciences (NIH/NIEHS).

Journal of Toxicology. Clinical Toxicology.

This is the official publication of the American Academy of Clinical Toxicology and European Association of Poisons Centres and Clinical Toxicologists.

NeuroToxicology

The focus is on the effects of toxic substances on the nervous system.

Electronic Sources

Databases

Two comprehensive databases on toxicology are MICROMEDEX® Healthcare Series and TOXLINE. The *Hawaii Medical Library* subscribes to the MICROMEDEX® Healthcare Series and offers this on its CD-ROM network. TOXLINE is available through a mediated literature search by the Reference Staff.

MICROMEDEX® Healthcare Series provides current and in-depth information on toxicology, pharmacology, emergency care, patient education, and environmental health and safety. MICROMEDEX® Healthcare Series databases useful for medical and emergency

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management of toxicologic conditions are:

POISINDEX® System: Commercial, pharmaceutical, and biological substance management.
TOMES® System: Industrial, environmental, and chemical substance management/
IDENTIDEX® System: Tablet and capsule identification
TOXICITY NOMOGRAMS AND CALCULATORS
MSDS from the United States Pharmacopeial Convention (USPC)
REPRORISK® System: Reproductive risk information system
DRUG-REAX® System: Interactive drug reactions
DRUGDEX® System: Drug evaluation monographs and adverse reactions
EMERGINDEX® System: Disease and trauma information

On a practice level, the Hawaii Poison Center operates a 24-hour telephone hotline and has immediate access to their MICROMEDEX® Healthcare Series databases. The Hawaii Poison Center cites the POISINDEX® System as their most frequently used database in the MICROMEDEX® Healthcare Series.⁴ Detailed information is provided on clinical effects, laboratory/monitoring, treatment, range of toxicity, kinetics, pharmacology/toxicology, animal toxicology, references, and author information.

TOXLINE (Toxicology Information Online), maintained by the National Library of Medicine, is a bibliographic database covering published material and research on toxicology. International in its scope, subject areas include pharmaceutical, biochemical, physiological, and toxicological effects of drugs and chemicals. Almost all citations include abstracts. TOXLINE may also be accessed through subscription Grateful Med.

Internet

The following Web-sites provide a wide selection of poisoning/toxicology information for the health professional. Many of these sites are United States government sponsored projects, have an affiliation with the American Association of Poison Control Centers, or an affiliation with a university. All sites are in the United States.

General information sites for the health care professional and public:

Agency for Toxic Substances and Disease Registry (ATSDR)
<http://atsdr1.atsdr.cdc.gov:8080/>

This site links to Public Health Statements, the HazDat database, and ToxFAQs.

Maryland Poison Center

<http://www.pharmacy.ab.umd.edu/~mpc/index.html>

This is a good site for poison information and prevention resource materials.

The National Lead Information Center (NLIC)

<http://www.nsc.org/ehc/lead.htm>

The NLIC, managed by the National Safety Council, provides information on environmental lead poisoning and prevention.

National Pesticide Telecommunications Network

<http://ace.orst.edu/info/nptn/>

This site is a cooperative effort of Oregon State University and the US Environmental Protection Agency.

UC Davis Poison Center Answer Book

http://wellness.ucdavis.edu/wellness/safety_info/poison_prevention/poison_book/index.html

This site is maintained by the University of California, Davis, Medical Center Regional Poison Control Center.

Technical sites for the health care / toxicology specialist:

Material Safety Data Sheets (MSDS)

<http://www.chem.uky.edu/resources/msds.html>

Maintained by the University of Kentucky, Department of Chemistry, this site provides links to organizations providing MSDS information.

Medical Management Guidelines for Acute Chemical Exposures

<http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000016/p0000016.htm>

ATSDR provides guidelines on the management of acute chemical exposure. These fact sheets also contain patient information handouts.

National Toxicology Program (NTP)

<http://ntp-server.niehs.nih.gov/>

This program reports on activities of the National Institute of Environmental Health Sciences (NIH/NIEHS), the National Institute for Occupational Safety and Health (CDC/NIOSH), and the National Center for Toxicological Research (FDA/NCTR).

Toxicology and Environmental Health Information Program (TEHIP)

<http://sis.nlm.nih.gov/tehip1.htm>

Maintained by the National Library of Medicine (NLM), this site provides links to NLM databases. Especially useful is Toxicology Tutor, a college level tutorial on the principles of toxicology.

For information about other resources at The Hawaii Medical Library, call the Reference Staff or visit our Web site (<http://hml.org>).

¹ National Safety Council. *Accident Facts*. 1996 ed. Itasca, IL: National Safety Council; 1996:15.

² Brandon AN, Hill DR. Selected list of books and journals for the small medical library. *Bull Med Libr Assoc* 1997;85(2):111-135.

³ Joint Commission on Accreditation of Healthcare Organizations. *Comprehensive Accreditation Manual for Hospitals: the Official Handbook*. IL: Joint Commission on Accreditation of Healthcare Organizations, 1996: IM38.

⁴ Hawaii Poison Center. *Annual Report for July 1995-June 1996*. Hawaii, 1996:3.